

Date: Thu, 26 May 94 04:30:13 PDT  
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>  
Errors-To: Ham-Digital-Errors@UCSD.Edu  
Reply-To: Ham-Digital@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Digital Digest V94 #164  
To: Ham-Digital

Ham-Digital Digest      Thu, 26 May 94      Volume 94 : Issue 164

## Today's Topics:

AEA CP-1  
How to run TCP/IP with Baycom?  
Straight Key Interface for Supermorse  
Undeliverable RFC822 mail: returning to sender

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>  
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 26 May 1994 01:06:00 GMT  
From: ihnp4.ucsd.edu!agate!boulder!csn!col.hp.com!news.dtc.hp.com!hplextra!hpcc01!  
trapps@network.ucsd.edu  
Subject: AEA CP-1  
To: ham-digital@ucsd.edu

I bought a CP-1 a few years ago and wrote a CPM program to vary work with the non-standard (radio) baud rates. I remember QST had some ads for software that was supposed to use a multisampling technique to eliminate noise. That may be the same one mentioned in the previous reply.

If your original computer interface is 5V only, you may have to dig up an obsolete RS232 pair of IC's. The nice folks at AEA sent me a pair for free when I asked if I could buy them. If not maybe you can kluge something with a 75xxx on an IC socket.

73,  
Steve Trapp, N4DG

-----  
Date: 25 May 1994 22:31:53 -0700  
From: ihnp4.ucsd.edu!news.cerf.net!ccnet.com!ccnet.com!not-for-  
mail@network.ucsd.edu  
Subject: How to run TCP/IP with Baycom?  
To: ham-digital@ucsd.edu

estey@skyler.mavd.honeywell.com wrote:

: I have a PacComm Baymod-9 working nicely on AX.25. I understand that with  
: the-correct software I can run TCP/IP. What do I need and where can I get  
: it? A description, at a top-level, of how this all works would also be  
: appreciated. -

: -----  
There is a driver called "AX25.COM" which can be used to allow a Baycom  
modem to be used with a TCP/IP package. I don't have a source for you at  
the moment, but you should be able to go on to an archie server and do a  
search for that program and find a few sources of it.

Be careful to get the latest version that you can find (Late 93 or 94).  
Earlier versions had some bugs. Also, I found that with my Baycom, it  
didn't generate enough power (it pulses the TX lead for this purpose) to  
allow the self powering features of my modem to work, and I had to  
externally power it.

Andy

-----  
Date: Wed, 25 May 1994 07:44:28 GMT  
From: usc!cs.utexas.edu!howland.reston.ans.net!europa.eng.gtefsd.com!  
newsxfer.itd.umich.edu!ncar!asuvax!pitstop.mcd.mot.com!mcdphx!schbbs!mothost!  
lmpsbbs!dub-fdev.dub.comm.mot.@@ihnp4.ucsd.edu  
Subject: Straight Key Interface for Supermorse  
To: ham-digital@ucsd.edu

Does anyone have information on a simple interface to allow a straight  
key operate with the Supermorse CW tutor ? The interface shown in the  
documentation is not complete.

Thanks,

David Gilmartin

-----  
Date: 26 May 94 03:49:08 GMT

From: news-mail-gateway@ucsd.edu  
Subject: Undeliverable RFC822 mail: returning to sender  
To: ham-digital@ucsd.edu

--Boundary (ID bGv0I/gJhpVyCaXQW9825A)

Your message could not be delivered to:

HUTIN@ASL

Your message has been enqueued and undeliverable for 77 hours.  
No further attempts will be made to deliver your message.

--Boundary (ID bGv0I/gJhpVyCaXQW9825A)  
Content-type: MESSAGE/RFC822

Received: from DECNET-MAIL (MBA5999) by sinet.slb.com (PMDf V4.2-12 #5530) id  
<01HCN770EIN400BOUN@sinet.slb.com>; Sun, 22 May 1994 15:08:49 MST  
Date: Sun, 22 May 1994 15:08:49 -0700 (MST)  
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>  
Subject: Ham-Digital Digest V94 #157  
To: HUTIN@ASL  
Message-id: <01HCN770FBKY00BOUN@sinet.slb.com>  
X-Envelope-to: HUTIN@ASL  
X-VMS-To: Ham-Digital@ucsd.edu  
MIME-version: 1.0  
Content-transfer-encoding: 7BIT

Ham-Digital Digest                      Sun, 22 May 94                      Volume 94 : Issue 157

Today's Topics:

9600 bps radio modems (2 msgs)  
9600 Packet / Motorola Transcievers  
??Type of cable from Mac to TNC??  
[SUMMARY] PK-232MBX vs. MFJ-1278B  
AEA CP-1  
Baycom circuit?  
JV-Fax and Soundblaster Cards  
RRADM FAQ?  
TNOS and NETROM.

TNOS Configurations files and facilities needed.

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Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>  
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Date: 20 May 94 07:41:00 GMT  
From: agate!ihnp4.ucsd.edu!swrinde!emory!cherry.atlanta.com!nanovx!wa4mei!totrbbs!  
steve.diggs@ucbvax.berkeley.edu  
Subject: 9600 bps radio modems  
To: ham-digital@ucsd.edu

Brian,

I appreciated your msg., as I have been working steadily over the past 13 months to get 9600 packet working for one of our LAN groups here in Atlanta, the East Atlanta LAN. It's tough, really tough. I'm presently experienced with the MFJ1270 and their kit, a G3RUH actually made by Paccomm, and a TAPR 9600 kit, which I installed in my PK232MBX. Each has some uniquely good and bad qualities. I can't really say that sloppy DCD performance has been at the core of it; or at least at my experience level I don't think it has.

-> work very well. Those circuits chatter; they occasionally false on  
-> background noise, and can be fooled by interference of various kinds.

I haven't seen either the G3RUH or the TAPR modem false indicate DCD, even once. I've seen it not pick up valid data (or so it looked to me) but not false.

I've been trying to work simplex right now; we don't have a full duplex repeater up yet; so we're limited to that. Also, I'm experimenting with half-duplex without a repeater.

I'm at the state where I can get each system to regularly decode another's beacon text, I can connect dependably (with an average of 1-2 retries) yet when I use mailbox features to simulate more robust traffic, often I get into retry hell. How can that be? How can I read a beacon great, connect great, just not put any meaningful amount of data through? Any ideas?

Regards,  
Steve Diggs, KB4ZTN  
East Atlanta LAN  
9600 Packet Project Manager

----

Top Of The Rock BBS - Lilburn, GA  
UUCP: tottrbbs.atl.ga.us  
Phone: +1 404 921 8687

SYSOP: Steve Diggs  
Snailmail: 4181 Wash Lee Ct.  
Lilburn, GA 30247-7407

-----  
Date: 21 May 94 10:13:00 GMT  
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!cherry.atlanta.com!  
nanovx!wa4mei!tottrbbs!steve.diggs@ucbvax.berkeley.edu  
Subject: 9600 bps radio modems  
To: ham-digital@ucsd.edu

-> What's wrong with using a squelch-derived DCD? It's possible to make  
-> a squelch that's fast and reliable -- in the Kantronics D4-10, the  
-> squelch response time is <well> under 10 milliseconds, and it is very  
-> solid.  
-> Is it really true that normal VHF radio squelches today are horribly  
-> slow? Has anyone measured the squelch speed of popular radios being  
-> used for 9600? It may be that even the slower ones could be made  
-> acceptably fast by clipping out a capacitor or two...

We're getting the cart before the horse in this message thread. 9600  
packet is an IF interface; squelch control is a AF section function. The  
audio at the IF is always unsquelched, and rightly so. Further,  
<anything> do to with the AF section screws 9600 transmissions up due to  
the normal pre-emphasis and de-emphasis curcuitry in the AF section. It  
seems that 9600 packet audio requires it's own custom de-emphasis based  
on the exact discriminator used in order to get the eye pattern right to  
the modem. Hence the difficulty of getting the IF interface right.

So...bottom line is...doesn't matter how fast/slow the squelch  
is...you're way on the IF side of the squelch curcuit anyway.

I clearly state here that this is an area for ongoing discussions, as I  
am not satisfied with the work I've done so far in 9600 packet, so any  
help/comments/objections is appreciated.

Regards,  
Steve Diggs KB4ZTN

-----  
Top Of The Rock BBS - Lilburn, GA  
UUCP: tottrbbs.atl.ga.us  
Phone: +1 404 921 8687

SYSOP: Steve Diggs  
Snailmail: 4181 Wash Lee Ct.  
Lilburn, GA 30247-7407

-----  
Date: 20 May 94 07:28:00 GMT

From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!cherry.atlanta.com!  
nanovx!wa4mei!totrbbs!steve.diggs@ucbvax.berkeley.edu  
Subject: 9600 Packet / Motorola Transcievers  
To: ham-digital@ucsd.edu

Daniel,  
I caught your broadcast response offering info. on above subject.

I'm looking for interface info on adapting the Mitrek and Micor radios  
to 9600 baud use. Specifically, the modem interface and full duplex  
modifications.

I would appreciate you forwarding any info you have. I am forming a  
conference and file area on my ham radio BBS dedicated to 9600 packet.  
Perhaps, this will make it easier for hams to complete the interface in  
the future.

Regards,  
Steve Diggs, KB4ZTN

-----  
Top Of The Rock BBS - Lilburn, GA                   SYSOP: Steve Diggs  
UUCP: totrbbs.atl.ga.us                           Snailmail: 4181 Wash Lee Ct.  
Phone: +1 404 921 8687                           Lilburn, GA 30247-7407

-----  
Date: 21 May 94 22:09:28 GMT  
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!newsxfer.itd.umich.edu!  
zip.eecs.umich.edu!umn.edu!dialup-2-225.gw.umn.edu!krueg010@ucbvax.berkeley.edu  
Subject: ??Type of cable from Mac to TNC??  
To: ham-digital@ucsd.edu

> Newsgroups: rec.radio.amateur.digital.misc

A "typical" modem cable will not work correctly with HostMaster for the  
Macintosh. Most "High Speed" modem cables will work ok. Kantronics  
Host Mode uses hardware handshaking.

I've used a Radio Shack RS232 Jumper Box to convert Apple 1200 baud  
modem cables to work with HostMaster. I can give you the wiring  
diagram if you need it.

BTW, I wrote (and support) HostMaster for the Macintosh for Kantronics.

73,  
Kevin, N0IOS  
krueg010@maroon.tc.umn.edu

-----  
Date: Sun, 22 May 1994 08:35:25 GMT  
From: vigra.com!steve@network.ucsd.edu  
Subject: [SUMMARY] PK-232MBX vs. MFJ-1278B  
To: ham-digital@ucsd.edu

I got a lot of helpful replies to my recent "PK-232MBX vs. MFJ-1278B" post. Thanks much! Here's what I learned:

Most people strongly prefer AEA's gear over MFJ. Apparently, MFJ's quality control leaves something to be desired. Some have had better luck than others, but some replies indicate that MFJ does much poorer with weak signal HF, and the MFJ leaks significant amounts of RF, which hurts some more than others. The filtering on the PK-232 is much better than the MFJ's, and the tuning indicator is more useful.

Both units are about equal for local VHF packet, where filtering and discrimination isn't too much of an issue. Many recommended checking into the KAM units or PK900 as well, but I haven't yet.

ROM upgrades for the PK-232 are more expensive (\$75 + \$25 for docs) than the MFJ upgrades (\$25). If you plan on upgrading often, this may be an issue.

It's true that only the MFJ does SSTV and shaded Fax, so for those who use it for that, the AEA can't substitute. However, most replies recommended getting a basic Fax-only box if Fax is going to be a significant factor. The AEA-FAX (~\$100 hardware & software) is well recommended.

Apparently, AEA doesn't provide or make available any software to decode the Fax data from the PK-232, making it pretty useless. MFJ is a better about it, but doesn't get along with Windows very well. The MFJ software may also be minimally copy-protected, which seems odd.

The internal BBS feature on the MFJ (pbbs) seems a bit better than the PK-232's (PakMail). People like the CHAT command and some auto-forwarding features. It sounds like gobs of RAM aren't really an issue for personal mailboxes with medium traffic.

Overall, it sounds like the PK-232 is a much more reliable unit for Packet and other modes, but if SSTV or Fax are critical, MFJ or specialized boxes are the only option. Many suggested starting with the inexpensive Baycom (~\$50), but it only work's on DOS machines.

Thanks very much for all your responses! Especially these helpful folks:

barry@w2up.wells.com (Barry Kutner)  
Kok Chen <kchen@apple.com>  
kriss@AUSTIN.LOCKHEED.COM (R M Kriss)  
gsmlrn@gsm001.mendelson.com (Geoffrey S. Mendelson)  
gregg@plains.NoDak.edu (Joe Gregg)  
jwl@sedist.cray.com (Jim Lynch)  
mm1@Hounix.ORG (John Donaldson)  
levine@jericho.mc.com (Bob Levine)

Happy Hacking!

-Steve

Steve Haehnichen

steve@vigra.com

Vigra, Inc. San Diego, CA

(619) 597-7080 x116 Fax: (619) 597-7094

-----  
Date: 20 May 1994 17:10:02 -0400  
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!  
howland.reston.ans.net!gatech!udel!news2.sprintlink.net!news.sprintlink.net!  
deathstar.cris.com!starcore.cris.com!not-for-mail@@.  
Subject: AEA CP-1  
To: ham-digital@ucsd.edu

In article <Cq3wsr.9r7@cup.hp.com>, Tom Graham wrote:

>I have acquired an ancient(?) AEA CP-1 Computer Patch for RTTY and CW.

> software to use this thing on an IBMPC clone

There are two programs that I know will work... One is TOR... I don't remember the version... I think the last was TOR30x.ZIP... This was shareware... I also forgot the author...

The software that I use is BMK-MULTY... I am using a HAL CRI-200 modem... BMK-MULTY, written by G4BMK, is the ultimate RTTY/AMTOR/PacTOR/CW software for dumb modems... While the initial cost is high, and the software is not resaleable, because it is encoded with your callsign, it allows the use of simple, good and affordable old-style HF modems... Upgrading your modem is then relatively easy...

Check the back of QST for info on BMK-MULTY...

73... Marv...

+++ Marv Uphaus -- Muphaus@cris.com -- CompuServe: 72122,1253 ---  
+++ U.S. Mail: 4031 Airport Blvd. #49 -- Mobile, AL 36608 USA ---  
+++ Packet Radio: K4BVG @W4IAX.#MOBAL.AL.USA.NA Ph: 205 343-9256 ---



-----  
Date: 21 May 94 19:07:46 GMT  
From: agate!howland.reston.ans.net!usc!sdd.hp.com!portal.com!portal!combdyn!  
lhaven.UUmh.Ab.Ca!Pj\_Butts@ucbvax.berkeley.edu  
Subject: Baycom circuit?  
To: ham-digital@ucsd.edu

In a message dated Fri 20 May 94 10:43, Darryl.linkow@ledge.com (darryl Lin wrote:

DL> Newsgroups: rec.radio.amateur.digital.misc  
DL> Subject: Baycom circuit?  
DL> From: darryl.linkow@ledge.com (Darryl Linkow)  
DL> Path: dres.dnd.ca!netfs.dnd.ca!ub!news.kei.com!yeshua.marcam.com!usc!e  
DL> lroy.jpl.nasa.gov!netline-fddi.jpl.nasa.gov!nntp-  
DL> server.caltech.edu!news.claremont.edu!kaiwan.com!ledge!darryl.linkow  
DL> Distribution: world  
DL> Message-ID: <cf.1168.435.0N2EEAFD@ledge.com>  
DL> Date: Wed, 18 May 94 20:44:00 -0800  
DL> Organization: The Ledge PCBoard: Lake View Terrace, CA: (818) 896-  
DL> 2007  
DL> Lines: 15

DL> I have downloaded the Baycom software and read the manual. From  
DL> what I can understand, this software let's me use do packet without  
DL> a TNC. What I don't understand is how I connect my HT to my  
DL> computer. The manual shows some inputs to a serial port, but don't  
DL> I need a modem as well? Also, there is something about a small  
DL> circuit board to interface the radio to the RS-232 port. Anyone  
DL> have any info on this? Also, is anyone using Baycom? If so, are  
DL> you happy with it? Or should I spend a bunch of money and buy a  
DL> TNC? I am new to ham radio (I am still waiting for my license, 7  
DL> weeks now!) and don't know if I will like packet, so I am looking  
DL> to get my feet wet at a low cost, to see if I like it. Any info  
DL> would be appreciated.

DL> ---

DL> ~ OLX 2.2 ~ Darryl Linkow (818)346-5278 9 am - 5 pm PDT  
I HAVE BEEN RUNNING BAYCOM SOFTWARE FOR AWHILE NOW AND I LOVE IT.  
I HAVE ADDED THE YAPP DRIVER AS WELL AS A 7PLUS ENCODER/DECODER.  
YOU WILL NEED A BAYCOM MODEM TO CONNECT THIS TO YOUR RIG.  
I RUN ONE THAT IS A KIT FROM A&A ENGINEERING.  
THE BP-1 FROM TIGERTRONICS WORKS NOT TOO BAD EITHER BUT IT DRAWS IT'S  
POWER FROM YOUR RS-232 PORT SO I PREFER THE A&A UNIT AS IT HAS IT'S OWN  
POWER SUPPLY.IF YOU ARE INTERESTED IN MY MODIFIED VERSION OF BAYCOM,  
JUST DROP ME A LINE AND I WILL SEE WHAT WE CAN DO.  
73 FROM VE6PJB

-- Via DLG Pro v1.0

Preferred: Pj\_Butts@LHaven.UUmh.AB.CA  
Alternate: Pj.Butts@f3002.n134.z1.fidonet.org

-----  
Date: Sat, 21 May 94 10:13:05 -0500  
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!lll-winken.llnl.gov!noc.near.net!  
news.delphi.com!usenet@network.ucsd.edu  
Subject: JV-Fax and Soundblaster Cards  
To: ham-digital@ucsd.edu

Jim

I found the same thing when I examined the docs as well. It appears that there must be some provision for sound boards as you have the ability to direct the output of the program to the speaker, serial port, parallel port, or serial device.

A friend of mine uses the logitech board and has no problem in getting the program to run on that board. The problem appears to be the Sound blaster board only.

73 and thanks.  
Dave  
N8CLF @ WA6HAM.#NOCAL.CA.USA.NA

-----  
Date: 21 May 94 17:28:17 GMT  
From: agate!iat.holonet.net!danielr@ucbvax.berkeley.edu  
Subject: RRADM FAQ?  
To: ham-digital@ucsd.edu

Where do I find the FAQ for the group, or when will it be posted again?

An intrigued newbie..

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Date: 21 May 94 21:08:01 GMT  
From: agate!usenet.ins.cwru.edu!howland.reston.ans.net!EU.net!ub4b!  
idefix.CS.kuleuven.ac.be!news.fundp.ac.be!pbj@ucbvax.berkeley.edu  
Subject: TNOS and NETROM.  
To: ham-digital@ucsd.edu

Hello,

I see there's no NETROM facilities into the TNOS compiled distribution.  
I have some difficulties to recompile the TNOS with BC 3.1.  
I ask if someone includes the NETROM facilities into the TNOS and if  
it's possible to send me the exe.

I test the TNOS on a 286 and sometimes the system hanged and stop.  
I assume it's probably due to a lack of memory (only 2048 K) because  
the  
system stop when there are some connected features and only 12000 Bytes  
free.

Could you help me to boost the memory process.

Many thanks.

Pascal.

-----  
Date: 21 May 94 20:54:25 GMT  
From: agate!howland.reston.ans.net!EU.net!ub4b!idefix.CS.kuleuven.ac.be!  
news.fundp.ac.be!pbj@ucbvax.berkeley.edu  
Subject: TNOS Configurations files and facilities needed.  
To: ham-digital@ucsd.edu

Hello,

I try to use the NEWS facilities into TNOS so called NEWS Center.  
Unfortunately, I don't see any groups or like that when I connect the  
NEWS Center. I suppose I must configure some files. Into the  
autoexec.nos I start the NEWS, INFO and TUTOR server. At first, I try  
to have a NEWS center with more than two choices. I give the names for  
these facilities. But I only have two choices.  
Into the directory NEWS or NNEWS, some files must be configured I  
suppose.  
Into the directories INFO and TUTOR it's probably the same.  
Could someone help me to find the proper configurations to have  
NEWSgroups.  
Could someone help me to find or send me configurations files samples.

Best regards and many thanks.

Pascal.

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End of Ham-Digital Digest V94 #157

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--Boundary (ID bGv0I/gJhpVyCaXQW9825A)--

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Date: 25 May 1994 22:03:39 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!howland.reston.ans.net!usc!nic-nac.CSU.net!  
charnel.ecst.csuchico.edu!xmission!u.cc.utah.edu!cs.weber.edu!val@network.ucsd.edu  
To: ham-digital@ucsd.edu

References <jra.131.000A4F59@lawdept.daytonOH.ncr.com>,  
<548.18.uupcb@totrbbs.atl.ga.us>, <CqBqo0.5Ju@eskimo.com>st  
Reply-To : val@csulx.weber.edu  
Subject : >9600 bps packet (was: Re: 9600 bps radio modems)

In article <CqBqo0.5Ju@eskimo.com> rdonnell@eskimo.com (Bob Donnell) writes:  
>I'm suprised John didn't mention it - the new TAPR NETSIG mailing list is  
>heavily involved in discussing 9600 (and faster) modem/radio issues.

How do I read this mailing list? Is it a packet-only mailing list, or  
is it available to Internet users?

I'm especially interested right now because there is a local group of  
amateur radio operators (including me) who want to go to multi-megabit  
per second rates. We've been investigating the AT&T (NCR) WaveLAN cards.  
They go 2 Mbps and are spread-spectrum. Since they are FCC Part 15  
devices, there is no license required and no restrictions on content.  
Equipment covered under this can be up to 1 watt, but these cards only to  
1/4 watt. With appropriate Yagi antennas, we figure that we can make the  
distance. We'd prefer hacking the transmitters up in power output though.

We've also heard a rumor that there is a fairly easy way to do 10Mbps  
on 10 GHz.

Any pointers to this information on the Internet would be appreciated.

--

```
|===== #include <stdclaimer.h> =====// KB7VBF/P11 =|  
| "AMIGA: The computer for the creative mind" (tm) Commodore /// Weber State |  
| "Macintosh: The computer for the rest of us"(tm) Apple \\\/// University |  
|== "I think, therefore I AMiga" -- val@csulx.weber.edu ==\\///= Ogden UT USA =|
```

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End of Ham-Digital Digest V94 #164

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